

What is claimed is:

1. An internet terminal comprising:

a voice signal input/output terminal via which voice signals are output to and input from an external telephone terminal including a communications transceiver;

a control signal input/output terminal via which control signals are output to and input from the telephone terminal;

a voice signal relaying unit that performs a relaying process for transmitting voice signals received via the voice signal input/output terminal from the telephone terminal to another internet terminal via an internet and for outputting voice signals received from the another internet terminal via the internet to the telephone terminal via the voice signal input/output terminal;

a ring signal output unit that outputs a ring signal via the control signal input/output terminal to the telephone terminal when a ring signal for an internet call is received by the voice signal relaying unit from the another internet terminal via the internet;

a determining unit that determines whether a ring response signal is received via the control signal input/output terminal after the ring signal output unit has output the ring signal to the telephone terminal, the ring response signal being output from the telephone terminal in

response to the ring signal;

a message output unit that outputs a predetermined outgoing message to the another internet terminal through the voice signal relaying unit, the outgoing message prompting a caller at the another internet terminal to leave a message;

a memory that stores voice signals received by the voice signal relaying unit from the another internet terminal; and

10 a control unit that controls the voice signal relaying unit and the message output unit, wherein

the control unit controls the voice signal relaying unit to perform the relaying process when the determining unit determines that the ring response signal has been received from the telephone terminal, and

15 the control unit controls the message output unit to output the outgoing message to the another internet terminal and stores voice signals received by the message signal relaying unit from the another internet terminal into the memory when the determining unit determines that the ring response signal was not received from the telephone terminal.

2. The internet terminal according to claim 1, further comprising a playback unit that outputs a voice message based on the voice signals stored in the memory to the telephone terminal via the voice signal input/output unit

when a playback command from the telephone terminal is received via the control signal input/output terminal.

3. The internet terminal according to claim 1, further comprising a notifying unit that outputs a notification signal to the telephone terminal via the control signal input/output terminal when the voice signals from the another internet terminal are being stored in the memory, the notification signal notifying a user of presence of a recorded voice message.

4. The internet terminal according to claim 3, further comprising a playback unit that outputs a voice message based on the voice signals stored in the memory to the telephone terminal via the voice signal input/output terminal when a notification response is received via the control signal input/output terminal from the telephone terminal, the notification response being output from the telephone terminal in response to the notification signal.

5. A telephone terminal comprising:

a telephone line connecting terminal that connects to a telephone line network;

a transceiver that enables a voice call based on voice signals transmitted to and received from an external telephone terminal via the telephone line connecting terminal and the telephone line network;

a voice signal input/output terminal via which voice

signals are output to and input from the internet terminal
of claim 3;

5 a control signal input/output terminal via which
control signals are output to and input from the internet
terminal;

a first notifying unit that notifies a user of an
incoming call when a ring signal is received from the
internet terminal via the control signal input/output
terminal;

10 an input unit that inputs a call-initiate command to
initiate an internet call through operations by the user;

a switching unit that switches a transmission terminal
between the telephone line connecting terminal and the voice
signal input/output terminal, wherein the switching unit
15 switches the transmission terminal to the voice signal
input/output terminal when the call-initiate command is
input;

a terminal controller that outputs a ring response
signal to the internet terminal via the control signal
20 input/output terminal when the call-initiate command is
input, the ring response signal instructing the internet
terminal to perform a relaying process for relaying voice
signals between another internet terminal and the voice
signal input/output terminal; and

25 a second notifying unit that notifies the user of a

stored voice message when a notification signal is received from the internet terminal.

5 6. The telephone terminal according to claim 5, wherein voice signals are transmitted to and from the transceiver via the transmission terminal.

10 7. The telephone terminal according to claim 5, further comprising a response signal output unit that outputs a notification response to the internet terminal via the control signal input/output terminal when the notification signal is received from the internet terminal via the control signal input/output terminal, the notification response indicating that the notification signal has been received.

15 8. The telephone terminal according to claim 5, wherein:

the input unit further inputs a playback command through operations by the user;

20 the switching unit switches the transmission terminal to the voice signal input/output terminal when the playback command is input; and

25 the terminal controller outputs the playback command via the control signal input/output terminal to the internet terminal, the playback command instructing the internet terminal to output a voice message based on voice signals stored on the internet terminal.

9. A telephone terminal comprising:

a telephone line connecting terminal that connects to
a telephone line network;

a transceiver that enables a voice call based on voice
5 signals transmitted to and received from an external
telephone terminal via the telephone line connecting
terminal and the telephone line network;

a voice signal input/output terminal via which voice
signals are output to and input from the internet terminal
10 of claim 4;

a control signal input/output terminal via which
control signals are output to and input from the internet
terminal;

a first notifying unit that notifies a user of an
15 incoming call when a ring signal is received from the
internet terminal via the control signal input/output
terminal;

an input unit that inputs a call-initiate command to
initiate an internet call through operations by the user;

20 a switching unit that switches a transmission terminal
between the telephone line connecting terminal and the voice
signal input/output terminal, wherein the switching unit
switches the transmission terminal to the voice signal
input/output terminal when the call-initiate command is
25 input;

a terminal controller that outputs a ring response signal to the internet terminal via the control signal input/output terminal when the call-initiate command is input, the ring response signal instructing the internet terminal to perform a relaying process to relay voice signals between another internet terminal and the voice signal input/output terminal;

a response signal output unit that outputs a notification response to the internet terminal via the control signal input/output terminal when a notification signal is received from the internet terminal, the notification signal indicating that a voice message has been stored on the internet terminal;

a memory that stores a voice message received from the internet terminal, the voice message being output from the internet terminal in response to the notification response; and

a second notifying unit that notifies the user of the voice message stored in the memory.

10. The telephone terminal according to claim 9, further comprising a playback unit, wherein the input unit further inputs a playback command through operations by the user, and the playback unit outputs the voice message stored in the memory to the transceiver when the playback command is input.

11. An internet telephone system comprising:
the internet terminal of claim 3; and
a telephone terminal including:
a telephone line connecting terminal that connects
5 to a telephone line network;
a transceiver that enables a voice call based on
voice signals transmitted to and received from an external
telephone terminal via the telephone line connecting
terminal and the telephone line network;
10 another voice signal input/output terminal via
which voice signals are output to and input from the voice
signal input/output terminal of the internet terminal;
another control signal input/output terminal via
which control signals are output to and input from the
15 control signal input/output terminal of the internet
terminal;
an incoming-call notifying unit that notifies a
user of an incoming call when a ring signal is received from
the internet terminal via the another control signal
20 input/output terminal;
an input unit that inputs a call-initiate command
to initiate an internet call through operations by the user;
a switching unit that switches a transmission
terminal between the telephone line connecting terminal and
25 the another voice signal input/output terminal, wherein the

switching unit switches the transmission terminal to the another voice signal input/output terminal when the call-initiate command is input;

5 a terminal controller that outputs a ring response signal to the internet terminal via the another control signal input/output terminal when the call-initiate command is input; and

10 a message notifying unit that notifies the user of a stored voice message when the notification signal is received from the internet terminal.

12. The internet telephone system according to claim 11, wherein:

the input unit further inputs a playback command through operations by the user;

15 the switching unit switches the transmission terminal to the another voice signal input/output terminal when the playback command is input; and

20 the terminal controller outputs the playback command via the another control signal input/output terminal to the internet terminal, the playback command instructing the internet terminal to output a voice message based on voice signals stored on the internet terminal.

13. An internet telephone system comprising:

the internet terminal of claim 2; and

25 a telephone terminal including:

a telephone line connecting terminal that connects
to a telephone line network;

a transceiver that enables a voice call based on
voice signals transmitted to and received from an external
5 telephone terminal via the telephone line connecting
terminal and the telephone line network;

another voice signal input/output terminal via
which voice signals are output to and input from the voice
signal input/output terminal of the internet terminal;

10 another control signal input/output terminal via
which control signals are output to and input from the
control signal input/output terminal of the internet
terminal;

an incoming-call notifying unit that notifies a
15 user of an incoming call when a ring signal is received from
the internet terminal via the another control signal
input/output terminal;

an input unit that inputs a call-initiate command
to initiate an internet call through operations by the user;

20 a switching unit that switches a transmission
terminal between the telephone line connecting terminal and
the another voice signal input/output terminal, wherein the
switching unit switches the transmission terminal to the
another voice signal input/output terminal when the call-
25 initiate command is input;

a terminal controller that outputs a ring response signal to the internet terminal via the another control signal input/output terminal when the call-initiate command is input; and

5 a message notifying unit that notifies the user of a stored voice message when the notification signal is received from the internet terminal, wherein

the input unit further inputs a playback command through operations by the user;

10 the switching unit switches the transmission terminal to the another voice signal input/output terminal when the playback command is input; and

the terminal controller outputs the playback command via the another control signal input/output terminal to the
15 internet terminal.

14. An internet telephone system comprising:

the internet terminal of claim 4; and

a telephone terminal including:

a telephone line connecting terminal that connects
20 to a telephone line network;

a transceiver that enables a voice call based on voice signals transmitted to and received from an external telephone terminal via the telephone line connecting terminal and the telephone line network;

25 another voice signal input/output terminal via

which voice signals are output to and input from the voice
signal input/output terminal of the internet terminal;

another control signal input/output terminal via
which control signals are output to and input from the
control signal input/output terminal of the internet
5 terminal;

an incoming-call notifying unit that notifies a
user of an incoming call when a ring signal is received from
the internet terminal via the another control signal
input/output terminal;
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an input unit that inputs a call-initiate command
to initiate an internet call through operations by the user;

a switching unit that switches a transmission
terminal between the telephone line connecting terminal and
the another voice signal input/output terminal, wherein the
15 switching unit switches the transmission terminal to the
another voice signal input/output terminal when the call-
initiate command is input;

a terminal controller that outputs a ring response
signal to the internet terminal via the another control
20 signal input/output terminal when the call-initiate command
is input;

a response signal output unit that outputs a
notification response to the internet terminal via the
another control signal input/output terminal in response to
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the notification signal received from the internet terminal;

another memory that stores a voice message received from the internet terminal, the voice message being output by the internet terminal in response to the notification response; and

a message notifying unit that notifies the user of the voice message stored in the another memory.

15. A storing medium storing a control program of controlling an internet terminal, the control program comprising the programs of:

outputting a ring signal to an external telephone terminal via a control signal input/output terminal when a ring signal for an internet call is received by a voice signal relaying unit from another internet terminal via an internet;

determining whether a ring response signal is received via the control signal input/output terminal after having output the ring signal to the external telephone terminal, the ring response signal being output from the telephone terminal in response to the ring signal;

controlling the voice signal relaying unit to perform a relaying process for outputting voice signals received from the another internet terminal to the telephone terminal and outputting voice signals received from the telephone terminal to the another internet terminal when it is

determined that the ring response signal has been received from the telephone terminal; and

5 outputting a predetermined outgoing message to the another internet terminal through the voice signal relaying unit and storing voice signals received by the voice signal relaying unit from the another internet terminal into a memory when it is determined that the ring response signal was not received from the telephone terminal, the outgoing message prompting a caller at the another internet terminal to leave a message.

10 16. The storing medium according to claim 15, wherein the control program further comprises the program of outputting a notification signal to the telephone terminal via the control signal input/output terminal when the voice signals from the another internet terminal are being stored in the memory, the notification signal notifying a user of presence of a stored voice message.

15 17. A storing medium storing a control program for controlling a telephone terminal communicable with the internet terminal of claim 3, the control program comprising the programs of:

20 notifying a user of an incoming call when a ring signal is received from the internet terminal via a control signal input/output terminal;

25 inputting a call-initiate command to initiate an

internet call through operations by the user;

switching a transmission terminal from a telephone line connecting terminal to a voice signal input/output terminal when the call-initiate command is input;

5 outputting a ring response signal to the internet terminal via the control signal input/output terminal when the call-initiate command is input; and

notifying the user of a stored voice message when a notification signal is received from the internet terminal.

10 18. The storing medium according to claim 17, wherein the control program further comprises the program of outputting a notification response to the internet terminal via the control signal input/output terminal when the notification signal is received from the internet terminal

15 via the control signal input/output terminal, the notification response indicating that the notification signal has been received.

19. A storing medium storing a control program for controlling a telephone terminal communicable with the internet terminal of claim 4, the control program comprising

20 the programs of:

notifying a user of an incoming call when a ring signal is received from the internet terminal via a control signal input/output terminal;

25 inputting a call-initiate command to initiate an

internet call through operations by the user;

switching a transmission terminal from a telephone line connecting terminal to a voice signal input/output terminal when the call-initiate command is input;

5 outputting a ring response signal to the internet terminal via the control signal input/output terminal when the call-initiate command is input, the ring response signal instructing the internet terminal to perform a relaying process to relay voice signals between another internet
10 terminal and the voice signal input/output terminal;

outputting a notification response to the internet terminal via the control signal input/output terminal when a notification signal is received from the internet terminal, the notification signal indicating that a voice message has
15 been stored on the internet terminal;

storing a voice message received from the internet terminal into a memory, the voice message being output by the internet terminal in response to the notification response; and

20 notifying the user of the voice message stored in the memory.

20. The storing medium according to claim 19, wherein the control program further comprises the programs of inputting a playback command through operations by the user,
25 and outputting the voice message stored in the memory to a

transceiver when the playback command is input.